Wall Street and Commercial Real Estate

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CREPOC

Goals of Presentation

- Market Drivers
- Real Estate Capital Markets
- Real Estate Market Performance
- Conclusions & Forecast

Note: PPT Deck will be posted to www.GreerAdvisors.com

Most information is updated via Newsletter, sign up on web site.

- Market Drivers

Supply / Demand vs. Financing

Supply / Demand – Impacts Rent & Vacancy less on Value

- Most Demand ties to Jobs – Drives Vacancy (1), Rents (2)
  - Office – FIRE Employment, Portion of Service Employment
  - Retail – Household (HH) Formations, Income Growth
  - Industrial – Manufacturing & Distribution (Logistics)
  - Multifamily – HH Formations, non-Top 25% of HH Income
  - Hotel – Corporate Travel – Office & Industrial Employment

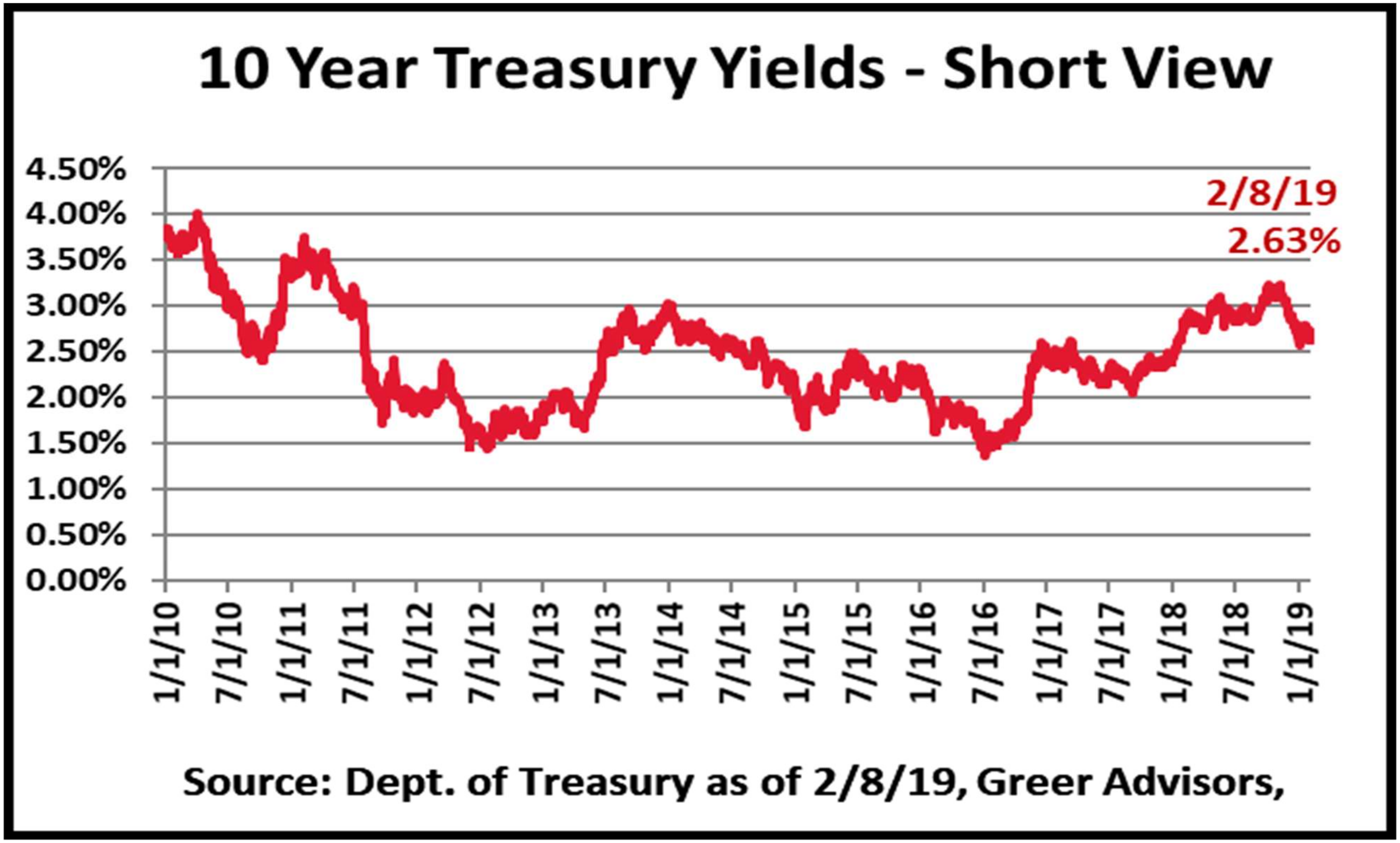
Financing DRIVES VALUE! Low Interest = High Value

- Availability
- Rate and Term
- Leverage
- Recourse
- International Investment **

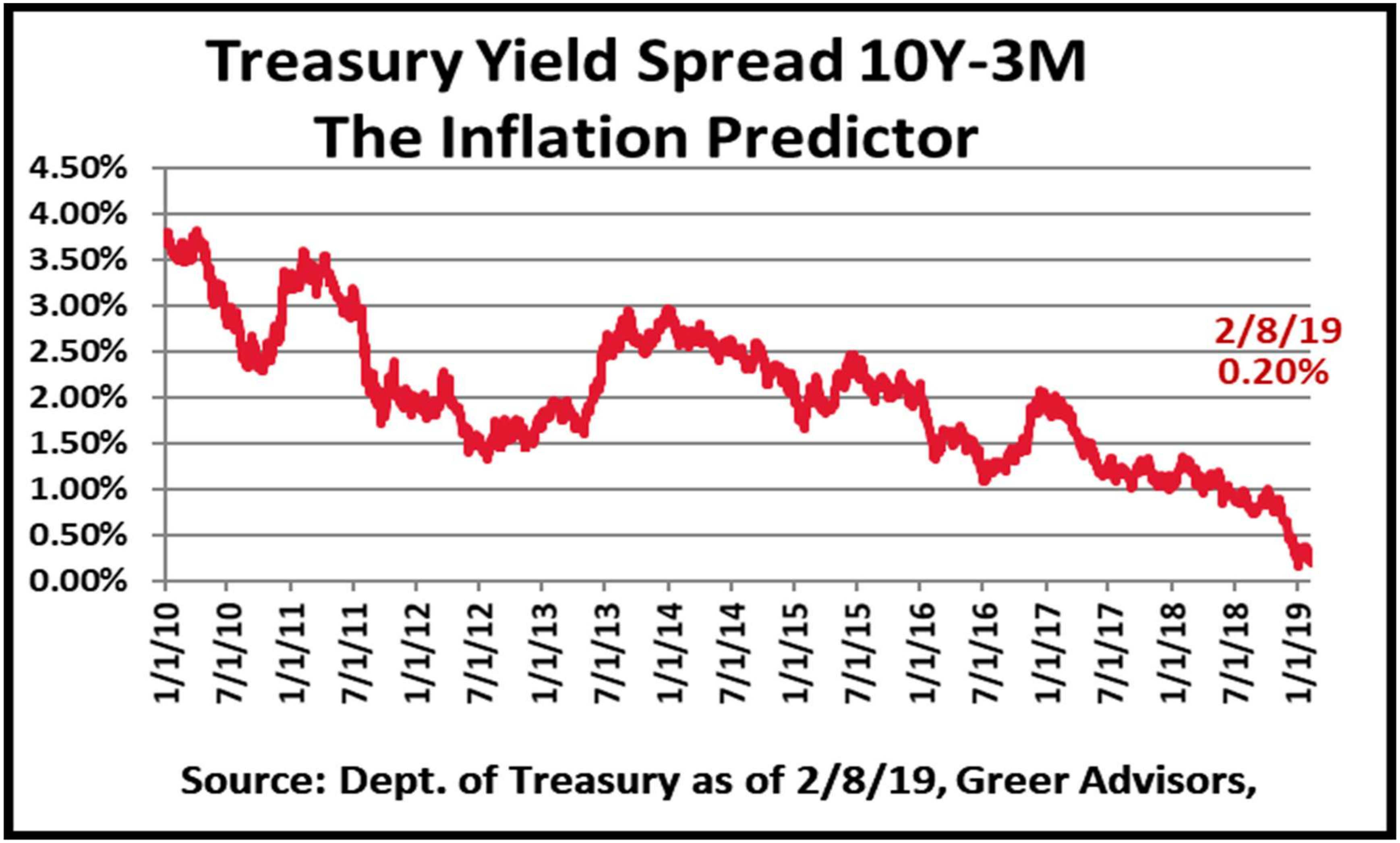
** This is mostly due to the drop in interest rates for CRE loans since the advent of CMBS.

Currency wars / restrictions, trade wars, FRB Rate Hikes, Global Turmoil, e.g. U.S. v China, Global perception of America

Interest Rates

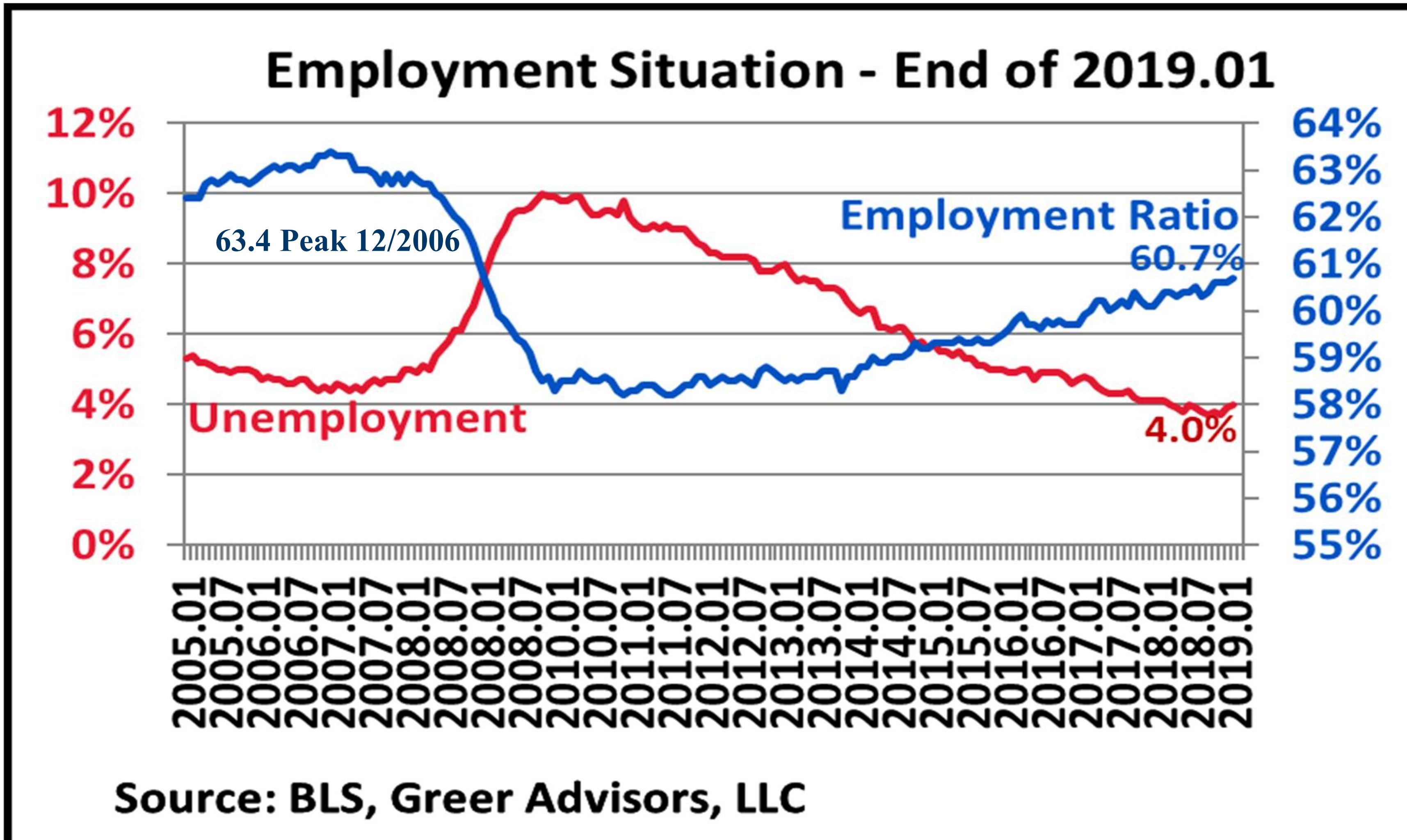


Inflation – Note correlation falls in fast changing markets



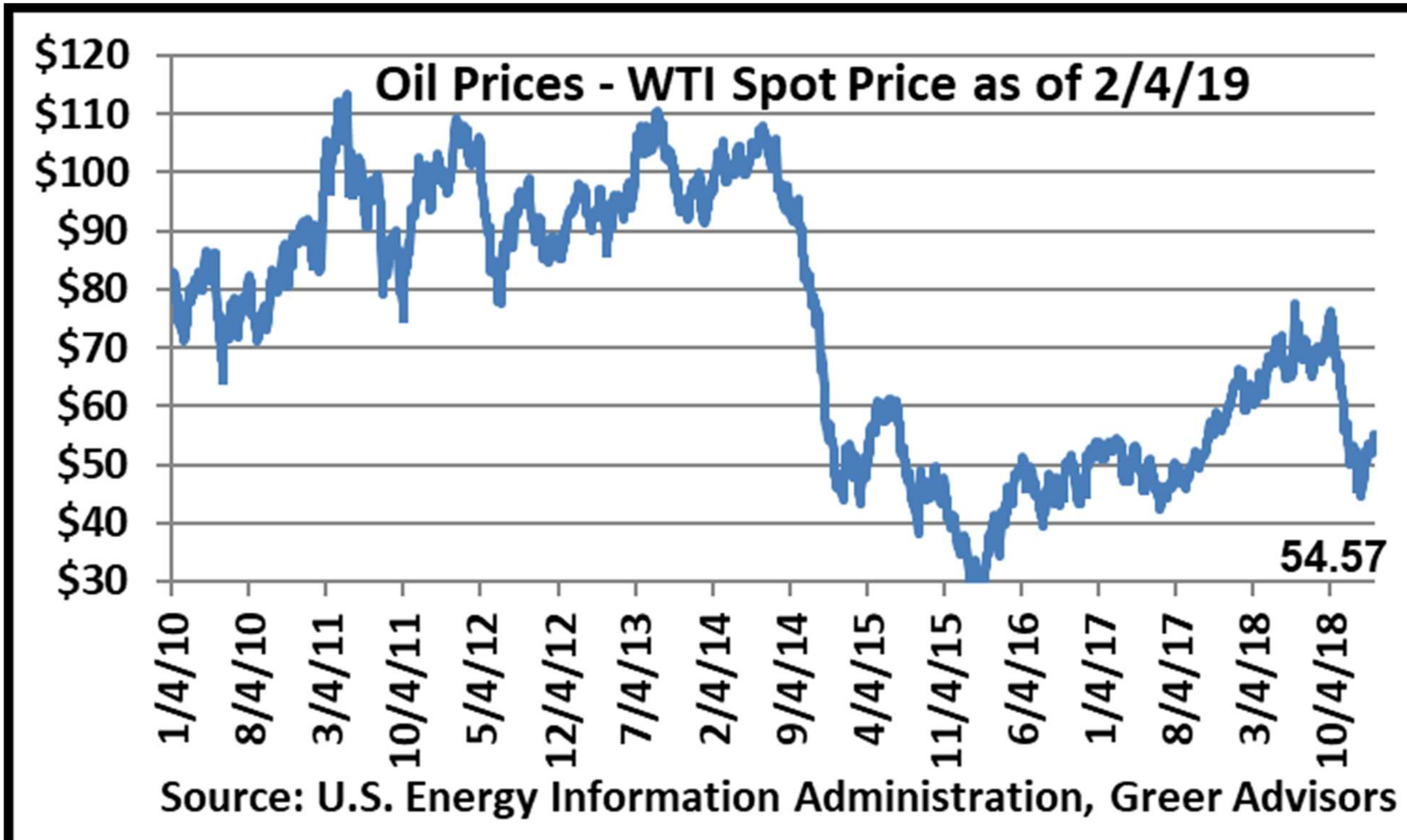
Note: When Interest Rates > GDP growth, this can go to negative aka deflation, as it did in the early 80's with 12-15% 10 Yrs.

Employment



Employment Ratio, aka Employment Population Ratio =
Employed persons 16 years and over, divided by the population.

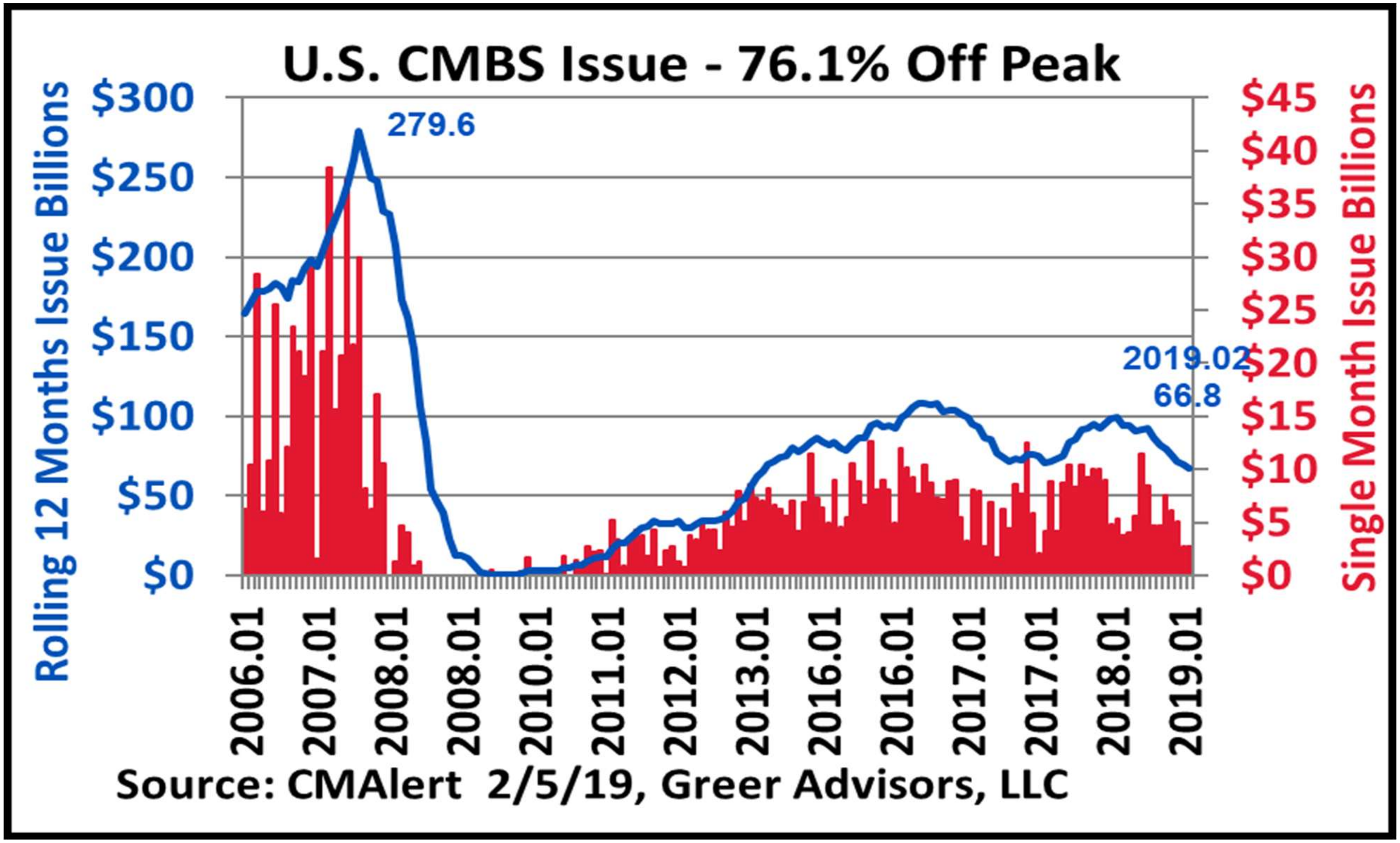
Oil Prices Remain Low, EIA



U.S. uses West Texas Intermediate Crude Oil, which is a much higher grade of crude than that used by many other countries.

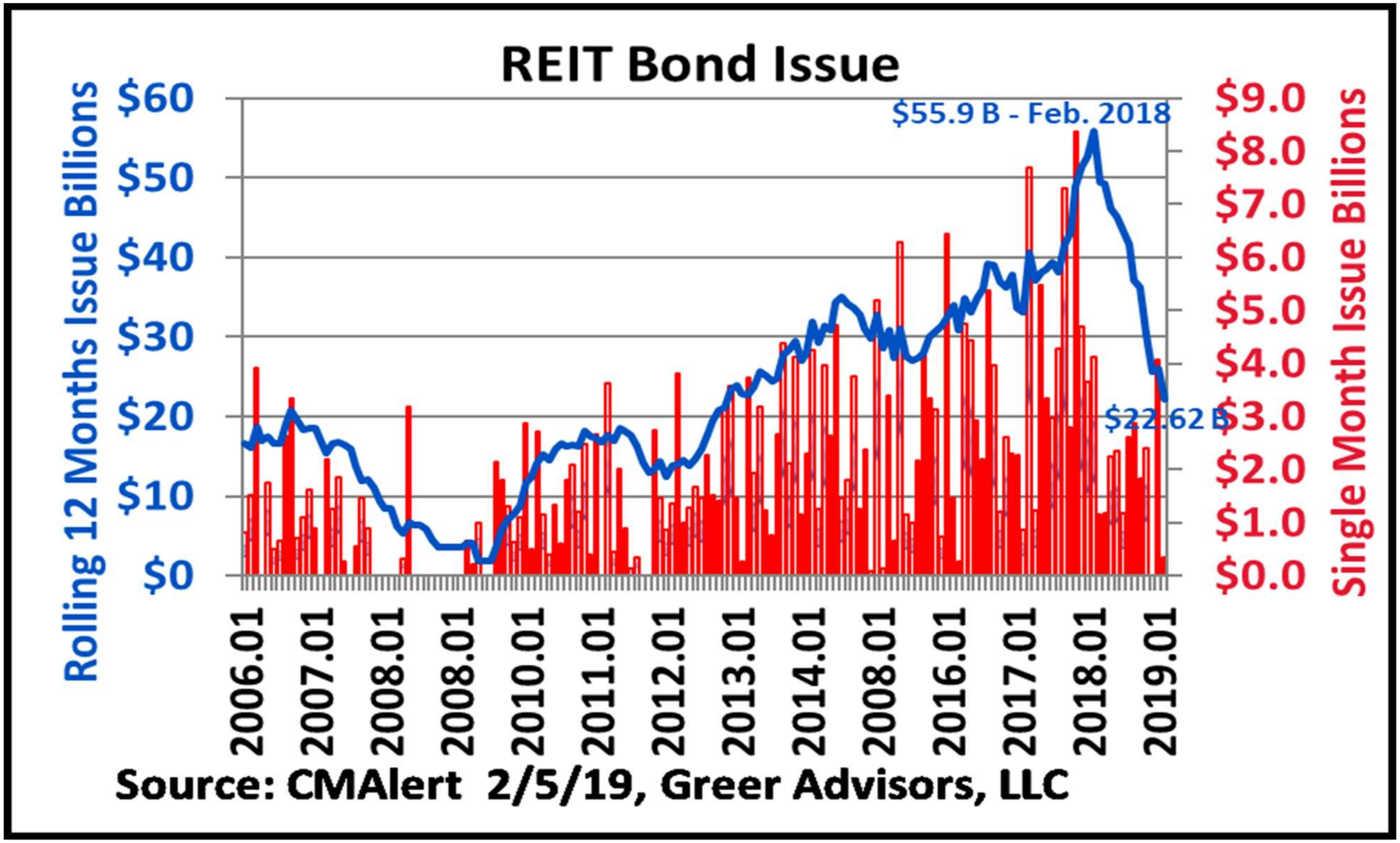
- Real Estate Capital Markets

CMBS Bond Issuance - Rose, Now Falling

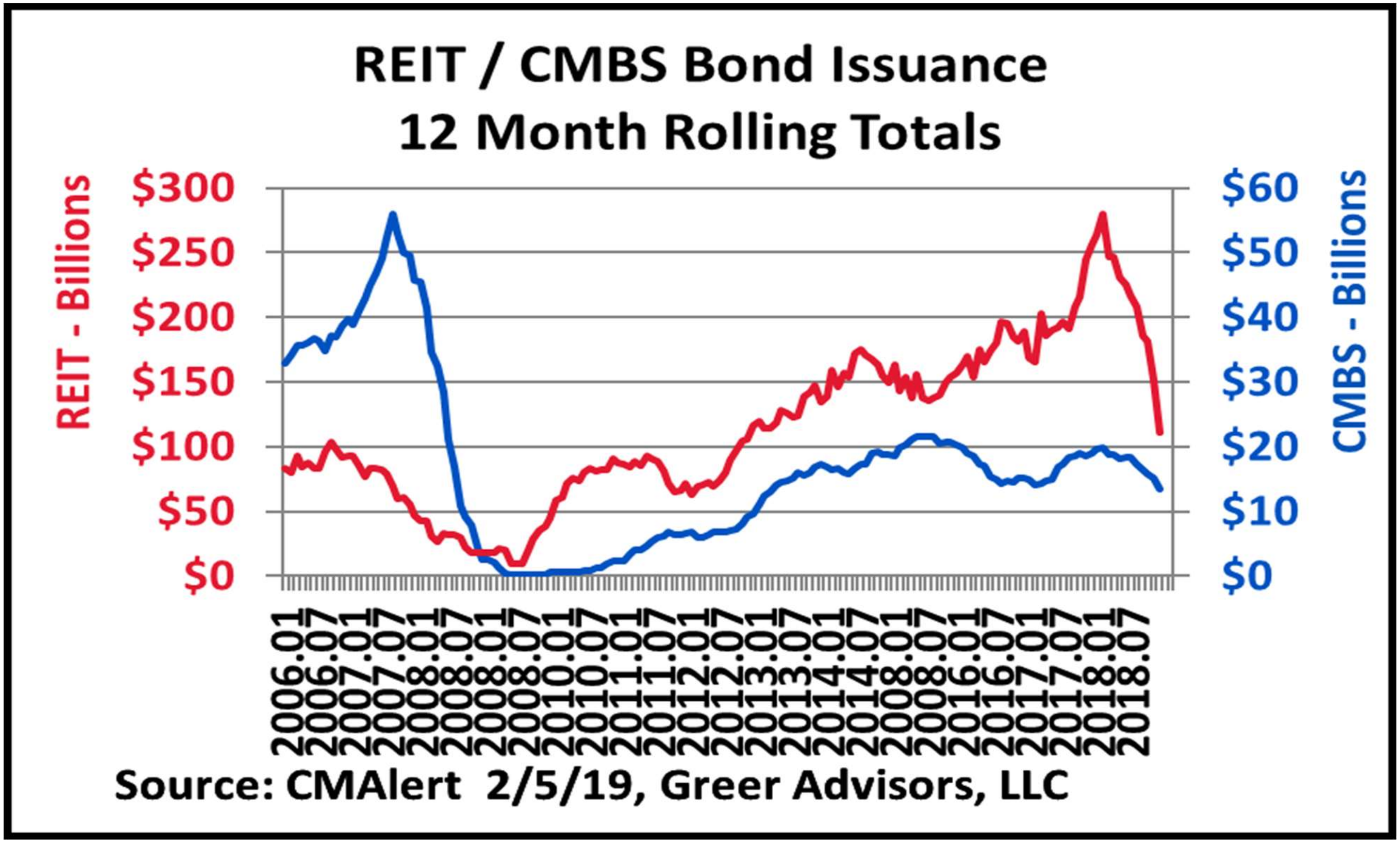


 Methodology Change effective 2018.01

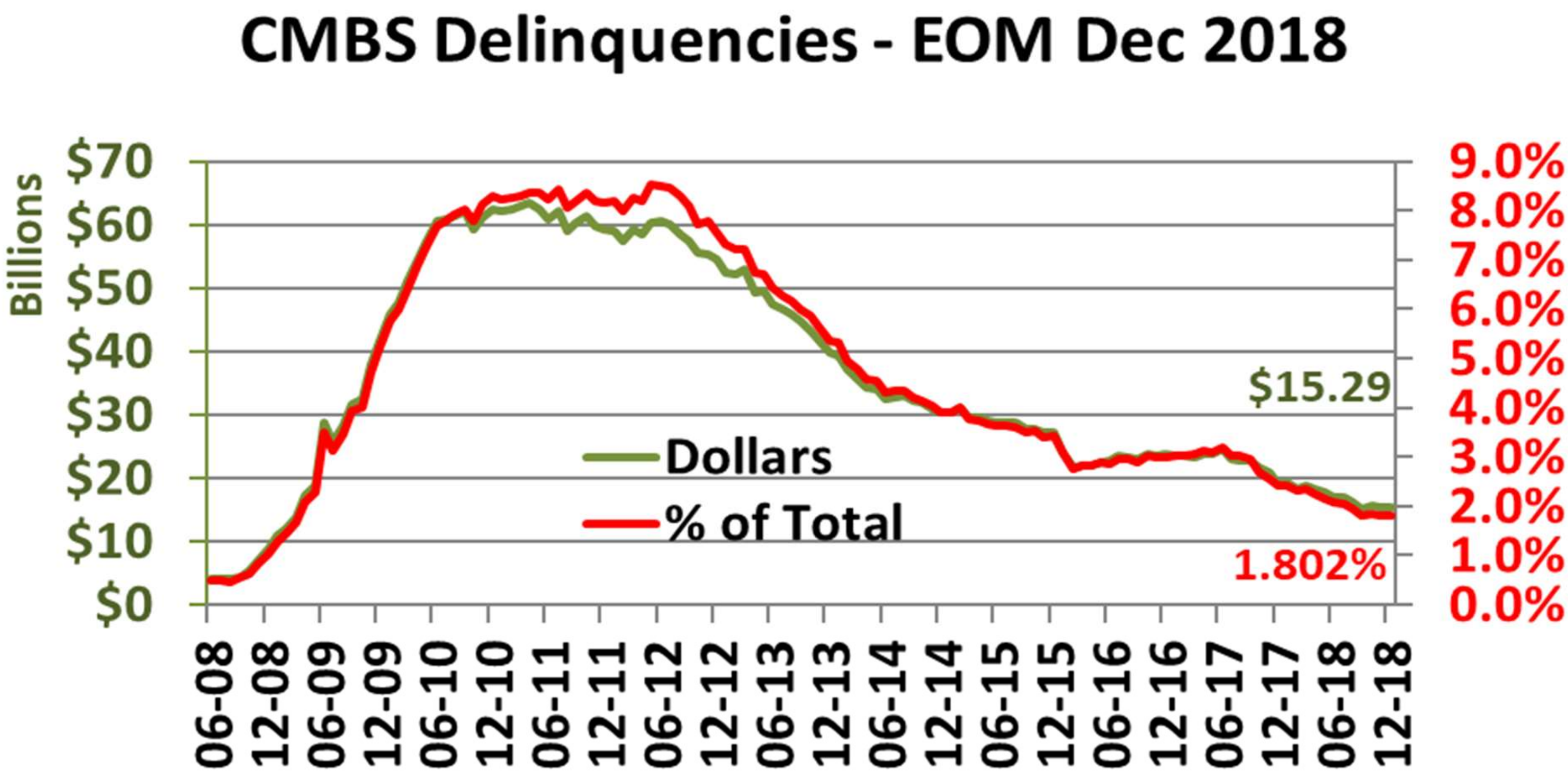
REIT Bond Issuance – Rose, Now Falling



CMBS and REIT Comparison



CMBS Delinquencies – Rise, Fall & Stabilize



Source: Morningstar CMBS Research, Greer Advisors, LLC

CMBS Delinquencies by Property Type

Trailing 12-Month Delinquency by Property Type

Property Type	*1/18	2/18	3/18	4/18	5/18	6/18	7/18	8/18	9/18	10/18	11/18	12/19
Healthcare	1.77	1.77	1.82	1.83	1.80	2.21	2.21	1.92	1.94	1.95	1.98	2.06
Hotel	2.48	2.48	2.49	2.29	2.13	2.06	2.09	1.95	1.91	1.78	1.74	1.39
Industrial	4.52	4.59	4.31	3.73	3.64	3.65	3.45	3.23	2.51	2.44	2.12	1.64
Multifamily	0.32	0.31	0.36	0.30	0.32	0.30	0.34	0.30	0.30	0.34	0.32	0.40
Office	5.24	4.99	5.17	5.00	4.59	4.32	4.22	3.90	3.74	3.66	3.66	3.22
Other	2.14	2.13	2.05	1.84	1.85	1.91	2.04	1.72	1.71	1.63	1.46	1.34
Retail	5.63	5.59	5.61	5.61	5.47	5.40	5.22	5.24	4.74	5.09	5.13	5.02

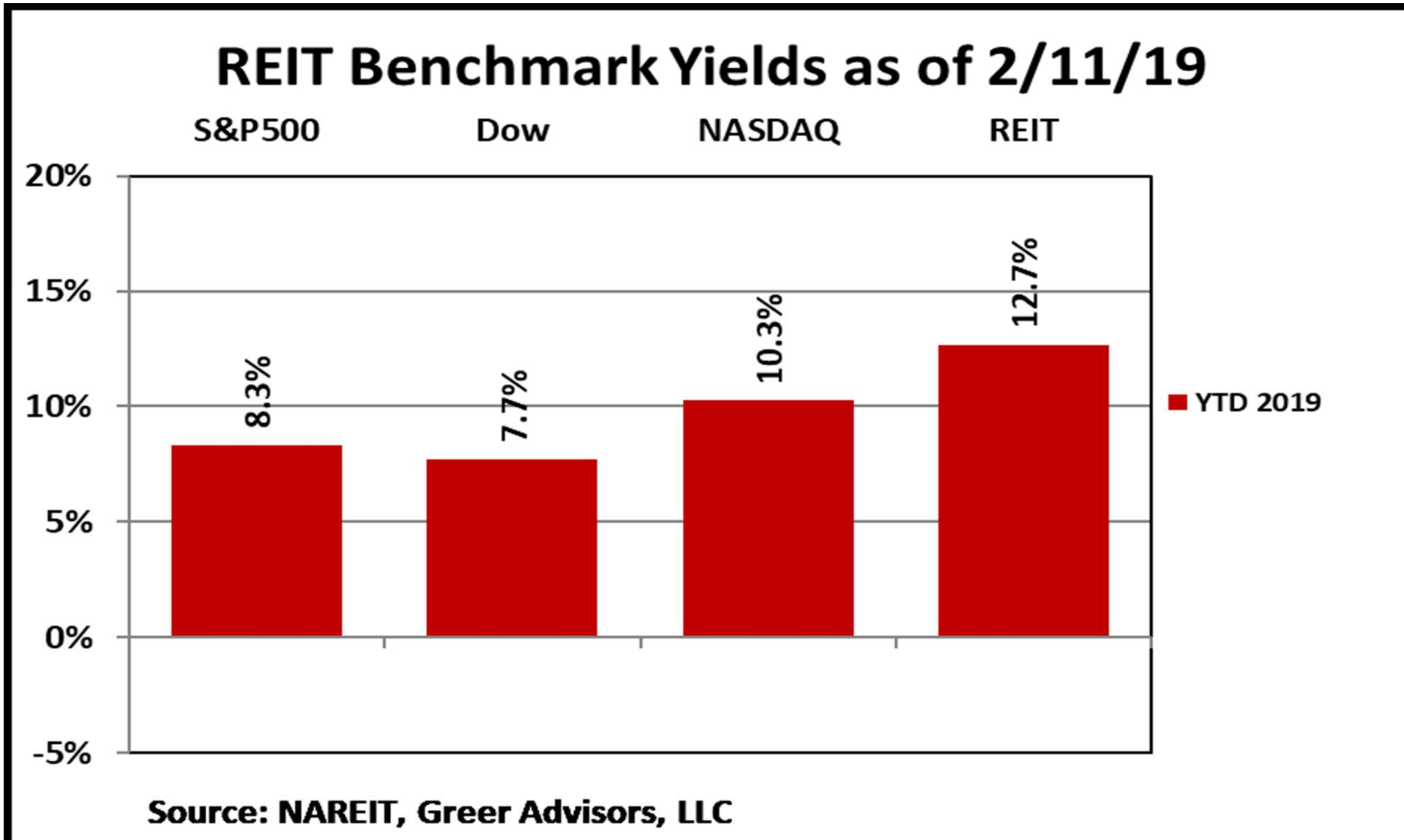
* 1/18 data was not published due to new format. The average of 12/17 and 2/18 is shown.

Source: Morningstar Credit Ratings, LLC, Greer Advisors, LLC

CMBS Delinquencies by Year – Worst

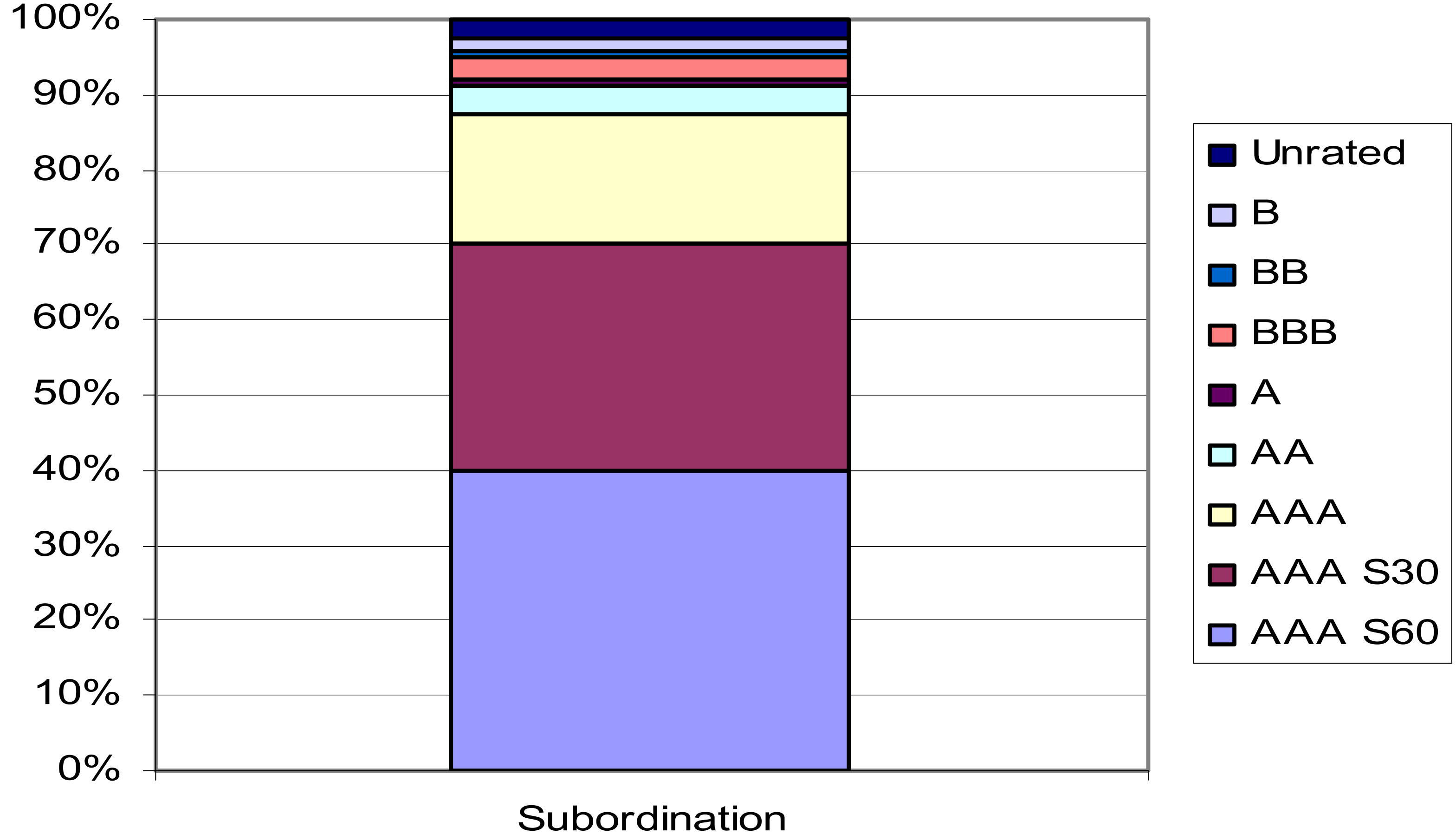
Delinquency by Year of Issuance - Worst 5 Years				
Year	$ Total Year	# Loans	% CMBS Univ	%
2007 Total	9,923,078,030	613	1.25	51.80
2006 Total	4,821,486,788	265	0.61	25.17
2005 Total	1,519,259,916	79	0.19	7.93
2008 Total	685,640,531	45	0.09	3.58
2014 Total	522,854,232	63	0.07	2.73
Top 5 Totals	17,472,319,497	1,065	2.21	91.21
Source: Morningstar Credit Ratings, LLC, Greer Advisors, LLC				

REIT vs Other Yields



- Risk Analysis

Bond Stack - Subordination



Note: The names of tranches have changed over years, and differ by rating agency. Markit's TM definition for CMBx is theirs.

Players in "Simple" CDS (Derivative)

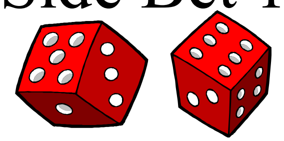
Business Issues Bonds

Bonds initially rated too poor for target market, e.g. "BB"

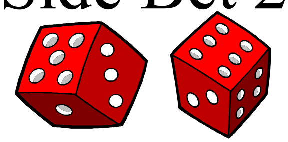
Rating Agency Rates Bonds

Gives loss forecast & enhancement amount required for "AA" rating

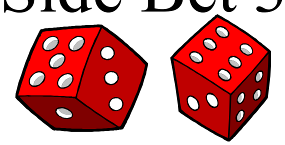
Side Bet 1



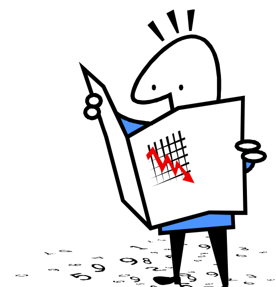
Side Bet 2



Side Bet 3



Investment Bank issues CDS (aka Credit Enhances Debt) as a Protection Seller then finds a Protection Buyer. (Counterparties)



Pension Fund Buys Bonds with CDS enhancement Thinks it's AA investment

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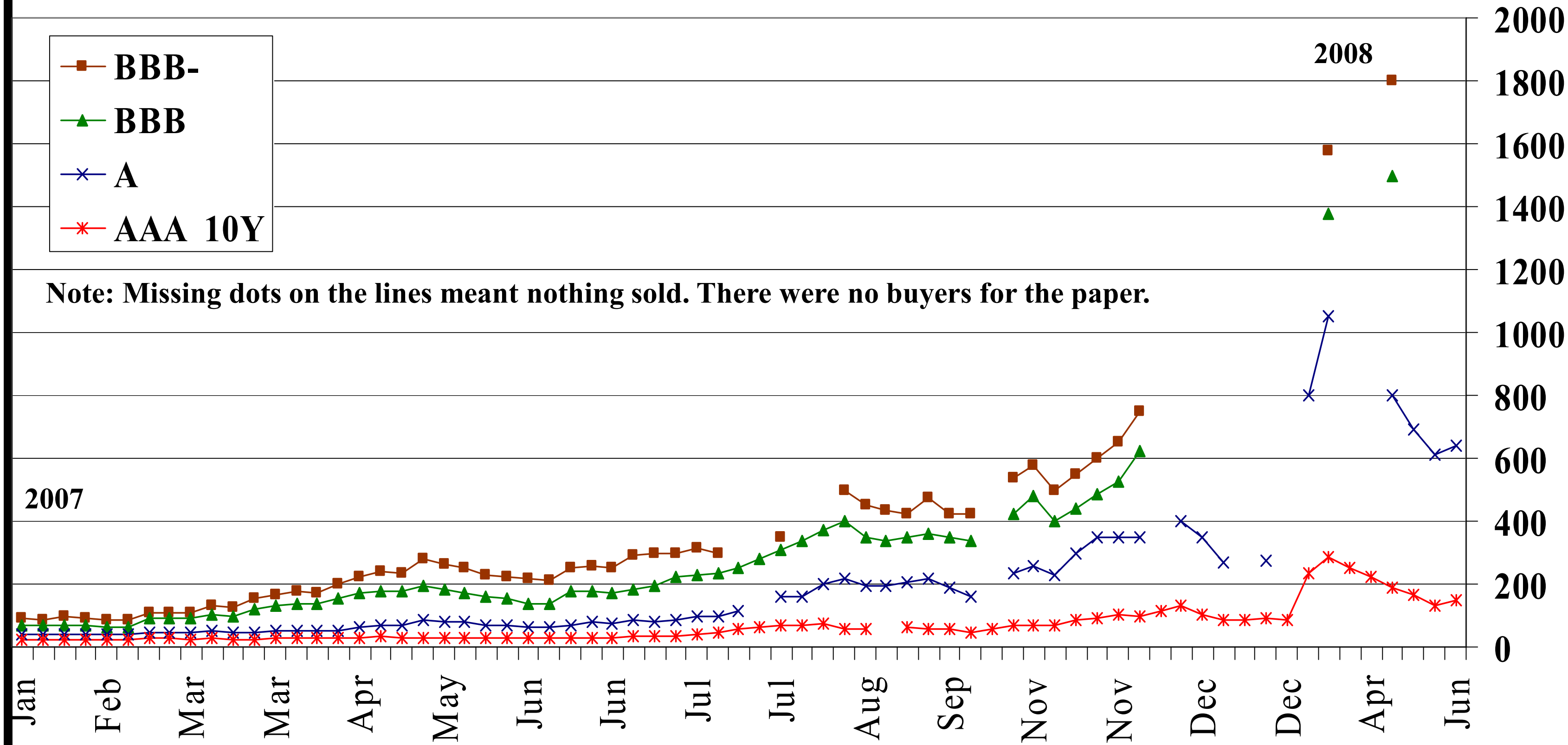
CMBS Yield Spreads (Swap Spread, bps) Old

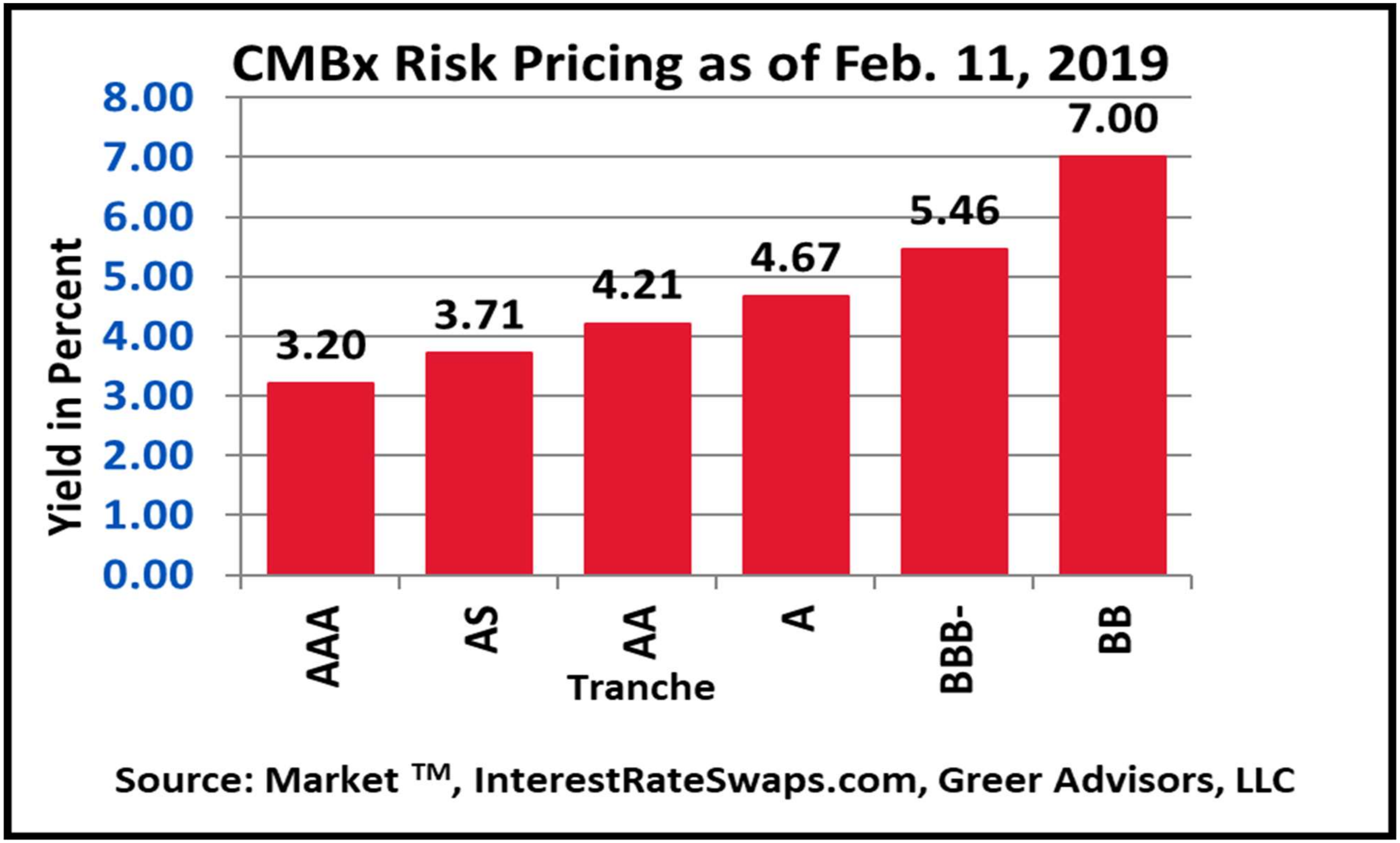


Source: CM Alert, Greer Advisors, LLC

Note: X-axis not to scale. Spreads are "over swaps" for 10-year Treasuries.

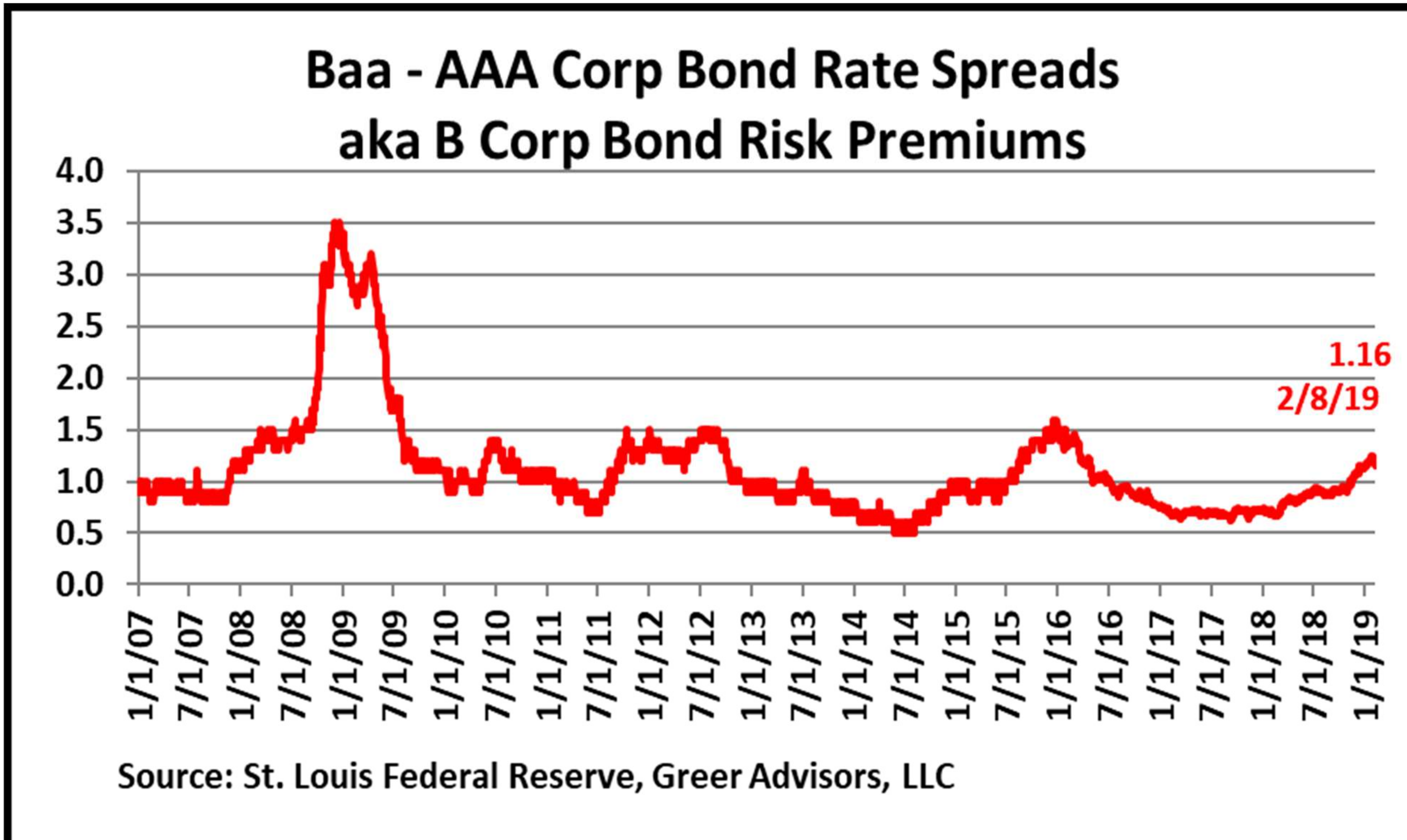
Note: This is what I sent throughout BofA in 2007-2009. A roughly 65 bp gap in 1/1/07 AAA vs BBB- became 1600 bp gap by 6/1/08

RISK PREMIUM – CMBx Derivative Pricing



Spread to Swap as of 2/11/2019. CMBx Series 12. Each series is most-recent 25 bond issues.

RISK PREMIUM – Bond World



Real Estate is perceived as much risker than Corporate Bonds.

- Market Comparisons
  - National & Local

RANKINGS BY VACANCY RATES

Industrial		YE 2018	
Rank	Metro	Vac %	Rent $
1	Toledo	1.8%	$3.32
2	West Michiga.	1.9%	$4.53
3	Los Angeles	2.5%	$12.20
4	Jacksonville.	2.7%	$5.19
5	Orange Count.	3.0%	$12.98
6	Detroit	3.0%	$6.13
7	Cincinnati	3.1%	$4.45
8	Portland	3.1%	$8.70
9	Nashville	3.4%	$5.73
10	Minneapolis	3.4%	$6.99
26	Orange Count.	3.0%	$12.98
3	Los Angeles	2.5%	$12.20
8	Inland Empir.	4.7%	$9.19
42	San Diego	4.8%	$15.25
51	Charlotte	5.9%	$4.87
52	Chicago	5.9%	$6.02
53	Dallas/Ft Wo.	6.2%	$6.42
54	Phoenix	7.1%	$7.38
55	Baltimore	7.5%	$5.65
	National Avg	4.5%	$6.94
	Min	1.8%	$3.32
	Max	7.5%	$24.05
	Spread	5.7%	$20.73

Office		YE 2018	
Rank	Metro	Vac %	Rent $
1	Albany/Schen.	3.7%	$15.95
2	West Michiga.	4.3%	$14.88
3	Louisville	5.5%	$17.44
4	San Francisc.	5.8%	$61.23
5	Nashville	6.0%	$27.58
6	Seattle/Puge.	6.1%	$32.63
7	Salt Lake Ci.	6.4%	$21.61
8	Orlando	6.5%	$21.27
9	Richmond VA	6.6%	$18.72
10	Tampa/St Pet.	6.6%	$22.04
44	Orange Count.	9.8%	$31.59
46	Los Angeles	9.9%	$36.74
16	Inland Empir.	7.1%	$21.48
45	San Diego	9.7%	$32.77
51	Las Vegas	12.1%	$20.09
52	Phoenix	12.6%	$25.61
53	Washington	12.8%	$35.90
54	Dallas/Ft Wo.	14.6%	$25.61
55	Houston	16.5%	$28.56
	National Avg	8.9%	$25.84
	Min	3.7%	$14.88
	Max	16.5%	$62.00
	Spread	12.8%	$47.13

Retail		YE 2018	
Rank	Metro	Vac %	Rent $
1	Albany/Schen.	2.0%	$13.02
2	Columbus	2.9%	$13.04
3	Portland	2.9%	$18.21
4	Raleigh/Durh.	2.9%	$17.76
5	East Bay/Oak.	3.0%	$26.00
6	Minneapolis	3.1%	$13.96
7	Seattle/Puge.	3.2%	$20.74
8	Nashville	3.2%	$18.11
9	Boston	3.3%	$19.44
10	Orange Count.	3.4%	$25.94
10	Orange Count.	3.4%	$25.94
25	Los Angeles	4.0%	$30.67
54	Inland Empir.	6.7%	$18.62
16	San Diego	3.8%	$23.13
51	Sacramento	6.1%	$16.89
52	Las Vegas	6.4%	$17.95
53	Oklahoma Cit.	6.5%	$13.32
54	Inland Empir.	6.7%	$18.62
55	Phoenix	6.9%	$15.86
	National Avg	4.3%	$17.06
	Min	2.0%	$10.45
	Max	6.9%	$38.19
	Spread	4.9%	$27.74

Note: 1) Rents are Quoted Rents, 2) National Totals Cover all 140+ Markets, 3) Rankings limited to Top 55 Markets based on RBA

Source: CoStar Group, Inc. Greer Advisors, LLC

141 market for Industrial. 142 Markets for Office & Retail

- Conclusions & Forecast

Question – Gold Standard

- There is a lot of 'Hype' on this topic. Many claim the Gold Standard kept America's currency as #1 in the world.
- Started in 1879. You could turn in $20.67 for an ounce of gold. In the 1930's (Great Depression) FDR (Roosevelt) cut the tie to gold to stimulate the economy, aka print free $$$.
- A few years later, when we returned, the country reportedly had gold reserves equal to 40% of outstanding currency. In 1971, President Nixon took us off the gold standard.
- Since that time, currency exchange rates fluctuate with the market, with the countries who are perceived as the best having the most favorable exchange rates (to them).
- If on a gold standard, the Feds can't print free money, can't have TARP, QE1, QE2, QE3 or other programs w/o Gold.
- To have 40% backing, Gold would be $10,000 an ounce. What % drives $$.

Conclusions and Forecast

- A softening of Dodd Frank (per Trump's Plan) could (big maybe) be good for Commercial Real Estate. Soften not eliminate! Many aspects are not done or were eliminated.
- Rent & Vacancy rates continue to improve across the Country for most (not all) markets and most property types
- Rent & Vacancy rate continue to improve across most of SoCal for most markets and most property types
- Most Markets are now well above 2007 Rent Levels
- Continued Low Oil Prices had been Keeping Interest Rates Low
- Fed Rate Hikes are now impacting Capitalization and Yield Rates. From December 2016 – December 2018, 8 hikes, 25 bps each. Fed Target Rate 200 bps higher than 2016.

Conclusions and Forecast - continued

- Chinese Restrictions on Exporting of Currency **Is** Impacting Demand for U.S. Real Estate, especially in Top markets…Roughly $6T in 2016 to current Target of $1T
- A Sudden Rise in Oil Prices Could be Devastating
- Tech & Oil Markets Have Improved the Most
- CMBS Issue steadily increased since the 2007/2009 fall, remains much lower than pre-fall levels, but have been dropping since 1st Half of 2018. Very Bad!
- CMBS Delinquencies Have Continued to Decline, Good!
- 2019 Forecast - CRE values will drop due to increases in interest rates, currency restrictions, trade wars and global fears. There is a Lag Effect on rate hikes and there impact on Cap/Yield rates. It's 6 months to two years depending on size and frequency of increase.

Questions / Answers / Conclusion / Forecast

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